PERCEIVED PARENTAL DRINKING PATTERNS AMONG ADULT ALCOHOLICS

IN RESIDENTIAL TREATMENT

By

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PERCEIVED PARENTAL DRINKING PATTERNS AMONG ADULT ALCOHOLICS IN RESIDENTIAL TREATMENT

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Abstract

Drinking in Alaska has almost reached epidemic proportions in some subcultures. Alaska Natives have the highest number of FAS cases as compared to non-Natives. Nationally, youth drinking has been correlated to parental drinking. This study addressed the issue of whether there is a difference between the perceived drinking of people in treatment by gender, age, and ethnicity. The parental drinking of one hundred and thirty-four people diagnosed as alcohol dependent or alcohol abusers and in treatment was examined. Significant differences were found between the perceived parental drinking by age, gender, and ethnicity. In addition, many of the subjects did not have a parental drinking model, which could indicate that parental problematic drinking is not a significant causation factor in adult alcohol dependence or alcohol abuse.

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Introduction

The family is customarily the primary socialization mechanism for most of today's youth. Children learn society's norms, roles, and expectations from their families. Current knowledge indicates that a parent's vocation, attitude, religion, level of education, and drinking patterns will endure in their off-spring (Hayes & Pittelkow, 1993; Idle, Wood & Desmarais, 1993; Simons, Beaman, Conger & Chao, 1993). Even though the mass media and peers influence a youth's decisions, the youth's home is still the first place where contact is made with some of society's enigmas: drugs/alcohol, violence, abuse, and sex. These early contacts can have a profound effect on an individual's life. Early sexual, physical and mental abuse have been investigated as antecedents of anti-social adolescent and adult behaviors (Greenwood, 1992).

The Alaska Department of Health and Social Services (ADHSS) (1991) lists 12.2% of injury deaths in Alaska as being related to alcohol/drugs. Alcohol is the 3rd leading cause of injury death among both Natives (15.75%) and non-Natives (10.72%). The prevalence of Fetal Alcohol Syndrome (FAS) among Alaska Natives is 3.0 – 5.2 per 1000 live births and 0.2 – 0. 3 per 1000 live births among non-Natives (ADHSS, 1998). ADHSS also reported that 90% of the children diagnosed with FAS in Alaska were Alaska Natives and that Alaska's Native population were at a higher risk of FAS than the non-Native population.

Alcohol use is ubiquitous among society's dysfunctions (U.S. Dept. of Health & Human Services, 1992). Given the central function of family in shaping children and the high rates of alcohol abuse in Alaska, one would expect that there would be a relationship between alcoholism and the type of parental drinking that occurred in the home while they were children. In fact, the consensus among researchers is that a person growing up in an alcoholic family generally has drinking or substance problems as an adult (Sher, Gershuny, Peterson & Raskin, 1996; Su, Hoffmann, Gerstein & Johnson,

1997). From the literature, three hypothesis were proposed for this study: (a) male alcoholics are more likely to have encountered more father and mother problematic drinking behaviors than female alcoholics, (b) Native alcoholics will have encountered more father and mother problematic drinking behaviors than non-Natives, and (c) there will be no significant difference between alcoholics under 35 and alcoholics over 35 in their report of problematic drinking by their parents.

The instruments, F-SMAST and M-SMAST, were administered to one hundred and thirty four people being treated for alcohol abuse or alcohol dependence at a regional treatment center. The scores of the instruments were analyzed using parametric and nonparametic statistical techniques. For the purpose of analysis the sample was divided into three groups, by gender (male/female), ethnicity (Native/non-Native), and age (under and over 35 years).

Review of Literature

Social Learning Theory

Bandura's (1971) explanation of human behavior implied that human behavior was a function of exposure to social models. Learning occurs by emulating behavior from different sources. Social Learning Theory explains how exposure to behavior by a social model results in three behavior effects. First, new patterns of behavior are established. Second, an inhibitory effect is caused following the observation of a negative consequence to a formally inhibited behavior; the observers decrease that behavior themselves. And third, a disinhibitory effect is caused following observation of no negative consequence to a formally inhibited behavior; the observers increase that behavior themselves. Not all observed behavior is learned or mimicked. Factors such as motivation, cues, reinforcement, and the relationship between model and observer are important determinants in the acquisition of any behavior.

In instances where an adverse combination of nature and nurture variables result in problem drinking, parental modeling of alcohol use may be a key element in alcohol use by adults. In his examination of the epidemiology of alcohol abuse among Indians May (1994) found that adult drinking styles are distinctly different between tribes and over time. What he found as an important determinant in prevalence rates were the drinking styles of the tribes. Flamboyant drinking styles encouraged abusive drinking among some subgroups.

Cooper, Waterhouse, and Sobell (1979) paired 32 men and 32 women, who were classified as either moderate or heavy drinkers by a self-report questionnaire, with either a male or female accomplice to examine gender effects on drinking in a modeling situation. The modeling situation was a fake taste test where the accomplice either modeled heavy alcohol consumption or light alcohol consumption. Cooper found men consumed significantly more wine when the accomplice was male rather than female. He found no other main or interaction gender effects that reached statistical significance.

Family as a Social Model

The family's effect as a social model has been studied in many areas. Simons et al. (1993) examined direct and indirect effects of family socialization on the type of parenting by husbands and wives. A longitudinal study of 451 two-parent families revealed that parents who were harshly disciplined as children were also very likely to use harsh discipline with their children. Kantor and Straus (1994) in their study of risk factors in the epidemiology of depression, suicide, alcohol abuse, child abuse, and wife beating, found that children who experienced corporal punishment in adolescence had an increased risk later in life of depressive symptoms, suicidal thoughts, alcohol abuse, physical abuse of children, and wife beating. Their study was based on approximately 4,500 families who were studied as part of the 1985 National Family Violence Survey. The sample consisted of 58% boys and 44% girls who recalled having been corporally punished one or more times during their teen years.

Hayes and Pittelkow (1993) reported that parental religious commitment was a superior predictor of current religious belief in their adult children. In a study of 3,012 Australian adults with children over 16 years of age, a strong positive correlation was found between the religious beliefs of the child and the religious beliefs of the parent. An important element in the strength of this correlation between parent and child religiousness was the relationship between the parent and child. Lack of conflict in the home increased the predictive nature of the parent to adult child findings. Additionally, Idle et al. (1993) studied parents' perception of acceptable gender typing and observed that the play patterns of the parents closely resembled those of the children.

Family as a Social Drinking Model

Empirical evidence shows that children from alcohol using families drink more than children from non-drinking families. Dorn (1983) examined teenage drinking and observed that drinking

appears to be a social act. Teenagers use alcohol to identify with the adult world. Dorn argues that if the adults in the family drink, then the youth of the household will accept drinking as part of the adult life and emulate adult drinking.

Lawson, Peterson, and Lawson (1983) discovered that problem drinking, moderate drinking, and abstinence were tied to family drinking habits. Lawson's research supports that of Barnes (1977) who observed that various patterns of alcohol use in adolescents are learned by imitation of the examples set by the parents in the home: abstaining home-abstaining youth, moderate home drinking-moderate youth drinking, heavy home drinking-heavy youth drinking.

McLaughlin, Baer, and Pokorny (1985) evaluated the relative contributions of peer and parental alcohol use and found both to be major predictors for alcohol use. In a cohort study, 688 students were surveyed the first year, then an additional 564 from the same school district a year later. A significant correlation was observed between reported alcohol use by students and peer use as well as parental use.

Hyphantic, Koutras and Liakos (1991) studied students with alcoholic parents. Their results showed that parental alcoholism was a strong predictor variable for the students' alcohol and drug use. The correlation increased in strength when relatives' and friends' alcoholism were also taken into account.

Block, Block, and Keyes (1988) reported that peer groups may be more influential in the decision of which substance to use, rather than whether the substances should be used. They suggest that, because some parents do not offer adequate modeling for the identification process of the child that leads to identity development, these children may be more impressionable by peers. Cahalan, Cisin, and Crossley (1969) found that of the men who responded that their fathers drank three or more times a week, 35% were heavy drinkers themselves as compared to 12% of men who reported that

their fathers never drank or drank less than once a year. They also found that men who were raised by only one parent tended to develop into heavy drinkers late in life.

Longitudinal research by Chassin, Clark, Presson, and Edwards (1992) indicated that substance use during adolescence contributed to job instability, low college involvement and early marriages. Asch and Levy (1990) also linked drinking age and drinking experience to fatal car accidents. Such factors as employment, education, marriage, and death, are recognizable as important factors in the quality of adult life and are negatively impacted by alcohol use.

Although youthful drinking may have an effect in some areas of later adult life, youthful drinking is not always related to adult drinking. Thorlindsson and Vilhjalmsson (1991) observed that early maturing boys at age 14 and 15 show more advanced drinking habits in young adolescence when compared to normal maturing boys. However, it did not indicate an increased risk for developing alcohol abuse in their young adulthood ages of 18 to 24. The psycho-social measurements of the boys were used instead of simply relying on chronological age. What seems to be a normal transition behavior to adulthood for one youngster could be a highly deviant act for someone of equal biological maturity.

A cross-sectional study by Chassin, Pillow, et al. (1993) found that maternal alcoholism was associated with heightened emotionality in children from the home, which increased the likelihood of the adolescent's experiencing negative effects that raised their risk for substance use.

One limitation commonly found in studies of youth's perception of parental and peer drinking is that all too often there is no collaborative evidence of the amount of drinking done by either group from an outside source. Subsequently, the drinking reported by the youth may be exaggerated or minimized depending on the youth's objective. Nonetheless, the evidence is growing in support of the fact that youth from drinking families drink more, and this undoubtedly complicates the individual's

maturing processes and decrease that youth's chances for a satisfactory quality of life.

Family Drinking Effects on Adults

Individuals who are nurtured in alcoholic families have different perceptions of alcohol than individuals who are raised in non-alcoholic families. In an investigation of how family drinking history is related to the experience of intoxication, O'Malley and Maisto (1985) studied 24 men, ages 19-30 years, who had parental alcoholism and compared them to controls matched on age and race without parental alcoholism. Each subject received either a placebo or two doses of alcohol, and were then measured for psychological and behavioral responses. Despite comparable Blood Alcohol Levels (BAC), men with non-alcoholic parents reported higher levels of impairment when questioned than men with alcoholic parents, regardless of the dose consumed. But when the men were given a timed motor task, the men from alcoholic families performed significantly worse. These results suggest that men socialized in alcoholic families, while equally intoxicated as men from non-alcoholic families, are less able to discern the psychological and physiological consequences of alcohol ingestion.

Cahalan et al. (1969) found that if a woman reported that her mother drank three or more times a week, then she was 44% more likely to be a heavy drinker herself. If a woman reported that her mother never drank or drank less than once a year, then she was only 15% likely to be a heavy drinker herself. Based on that study, a conclusion could be made that mother's drinking is a high risk factor for substance abuse by the daughter.

Maternal and paternal alcoholism can significantly predict the path of substance use in adult life. Chassin, Curran, Hussong, Colder (1997) conducted a longitudinal study on whether parent alcoholism significantly predicted adolescents' substance use growth. They found that homes with alcoholic fathers and boys showed steeper substance use growth over time than did homes with nonalcoholic fathers and girls. In their study, two parent families where at least one biological

alcoholic parent who was also a custodial parent (246) and controls (208) who had no biological or custodial alcoholic parents were measured on several mediators thought to predict substance use. They found both maternal and paternal alcoholism were related to decreased paternal monitoring. In turn, adolescents whose fathers reported lower levels of monitoring were more likely to associate with drug using peers, and those peer associations predicted an increase in substance use over time. Adolescents whose fathers reported less monitoring of their behaviors also had higher initial substance use levels at the first measurement. Maternal and paternal alcoholism also significantly predicted higher levels of stress. Adolescents with alcoholic fathers were not only more likely to use substances, but also increased their substance use at a more rapid rate than the control group.

Family dysfunction is often blamed for youth turning to alcohol for relief (Mothersead, Kivlighan, and Wynkoop, 1998) but rarely has it been investigated as a mediator for parents' drinking. Pelham et al. (1997) studied the effects of deviant child behavior on parental distress and alcohol consumption in laboratory interactions. Sixty parents, primarily nonproblem drinkers, interacted with boys trained to enact behaviors characteristic of either normal children or "deviant" children with externalizing behavior disorders: Attention-Deficit Hyperactivity Disorder (ADHD), Conduct Disorder (CD), and Oppositional Defiant Disorder (ODD). Parents who interacted with difficult youth reported significantly more anxiety, depression, and hostility than parents who interacted with compliant youth. The experiment was conducted by having the parent work on an Etch-a-Sketch project, balance a check book, then have the child clean up. After the interactions, parents were given the opportunity to drink as much of their preferred alcoholic beverage as they desired while anticipating a second interaction with the same child. The participants exposed to deviant youth consumed more alcohol than those exposed to normal youth. The study showed in a controlled experiment that, when exposed to deviant children, both mothers and fathers of normal children experienced considerable distress and

exhibited elevated alcohol consumption relative to parents interacting with normal children. Child behavior may play a contributory role in drinking problems in parents of children with ADHD and/or CD/ODD. The increase in alcohol consumption for single mothers in this study was nearly three times that for married mothers.

Peer Drinking Effects and Alaska Drinking Patterns

Nearly all alcohol use starts in pre-teen and adolescence. Oetting and Beauvais (1983) reported that between the ages of 12 and 13 Native Americans experience their greatest increase in exposure to alcohol and that exposure marks the real beginning of peer group influence. The believe that the period of high risk from peer pressure continues for at least six years but the probability that they will break down and try alcohol/drugs after that age is relatively low. Cotterell (1996) believes that peer groups are their own social environment capable of influencing both the initiation of substance use and supporting continued use. Finley (1989) found in a survey of 2,234 Montana students in grades 6-8 that Indian males were more likely to be alcohol users than non-Indian males and that Indian students were more likely to have a best friend who drank or that they had knowledge of numerous alcoholics. In a comparison of matched Canadian Indian and White adolescent research, Gfellner (1994) reported that in mother only, and mother-stepfather Indian families, more marijuana use and favorable peer attitudes toward drug use was reported than in matching White families. As reported earlier in this study, peer groups have proved to be strong predictors of adolescent alcohol use (May, 1994; McLaughlin et al.1985).

In a telephonic survey of a stratified random sample of 1535 adults in Alaska, ADHSS (1995) reported 59% of those surveyed reported drinking alcohol in the past month. The sample consisted of 313 Natives and 1222 non-Natives. Figure 1 represents the percent of each group that reported binge drinking, which is defined as five or more drinks on an occasion one or more times in the past month.

Figure 2 represents chronic drinking, which is defined as 60 or more drinks a month.

Figure 1. Alaska Behavioral Risk Factor Survey 1995 "Binge Drinking"

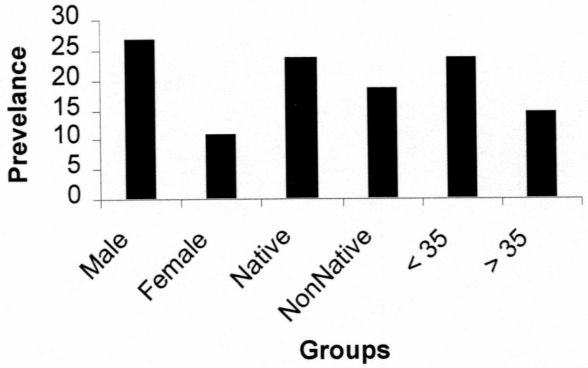

Figure 1. Males, Natives, and the under 35 groups binge more than other groups with males reporting the highest amount of binge drinking.

Figure 2. Alaska Behavioral Risk Factor Survey 1995 "Chronic Drinking"

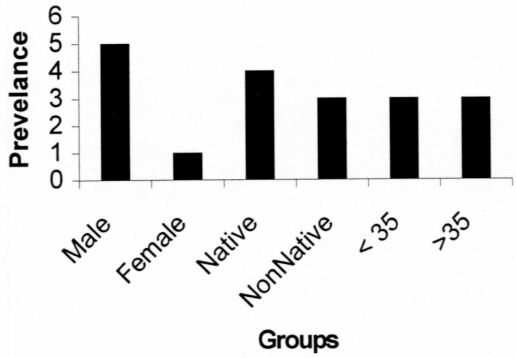

Figure 2. Males report the highest percentage of binge drinking while females report the lowest.

In Alaska, alcohol dependence and abuse rates were found to be twice as high among men as among women, and life time alcohol dependency was estimated as approximately 50% higher among Natives than non-Natives (ADHSS, 1999). Figure 3 presents Alaska treatment admissions.

Figure 3. Alaska State Admissions 1997 to 1999.

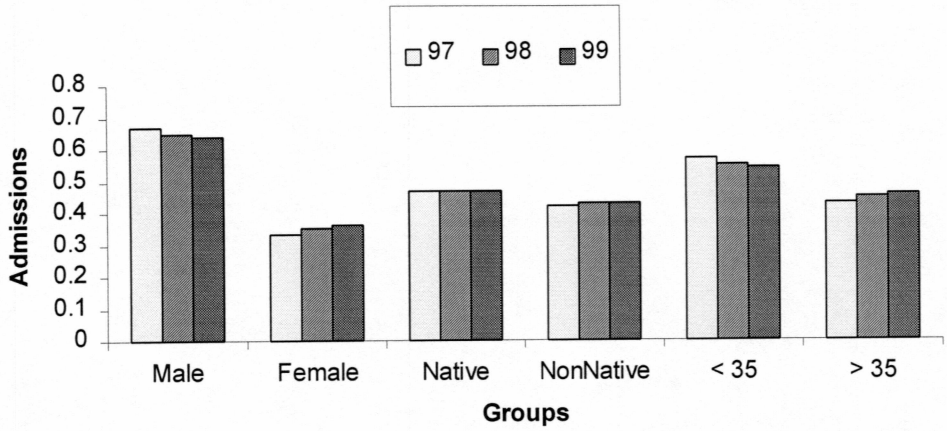

Figure 3. More males were admitted to treatment and the under 35 group had the second highest admission rate.

The three hypothesizes, garnered from the literature review, as stated on page one are: (1) male alcoholics are more likely to have encountered more father and mother problematic drinking behaviors than female alcoholics (ADHSS, 1995), (2) Native alcoholics will have encountered more father and mother problematic drinking behaviors than non-Natives (ADHSS, 1991, 1995, 1998, 1999), and (3) there will be no significant difference between alcoholics under 35 and alcoholics over 35 in their report of problematic drinking by their parents (ADHSS, 1995). The particular age levels were chosen due to the fact that only people 18 years and over are admitted to RCAOA. There are very few 50 year and older alcoholics in treatment. The demarcation of 35 between the two age groups was chosen because in a comprehensive review of adult alcoholism Sobell, Breslin, and Sobell (1997) concluded that 20-30 and a few years beyond is the age that most problematic drinking occurs. Choosing 35 as a cutoff also allows for comparison with other studies which also use 35 as an age guide.

Methods

Design and Sample

One hundred and thirty four adults who were diagnosed as meeting the American Society of Addiction Medicine (ASAM) patient placement criteria (U.S. Department of Health & Human Services, 1995) for treatment of alcohol abuse or dependence and were in treatment at Fairbanks Native Association (FNA) facilities comprised a convenience sample for the study. The cross sectional sample consisted of 31 Native males, 49 non-Native males, 27 Native females, and 27 non-Native females. Approximately half were over 35. Most, 84%, of the respondents had their first drink by age 16 and 80% noted that drinking became a problem for them by age 25. The majority of the respondents, 66%, were raised by a biological parent or parents, 22% by extended family members and 12% by either adopted or foster parents. Not having a father or mother model was reported by 21% (28) respondents. More women, 61%, were over 35 than men, 56% over 35. This characteristic of the subjects does differ from sample characteristics of other general treatment groups. Wechsberg, Craddock, and Hubbard (1998) found that a substantially greater percentage of men than women are over age 36 in all treatment modalities.

Procedures

The Mother Short Michigan Alcoholism Screening Test (M-SMAST) and the Father Short Michigan Alcoholism Screening Test (F-SMAST) (Appendix B) were administered to assess the parental adult alcohol use patterns. The data collection began January 1999 and ended February 1999. Clients were told participation was voluntary and were asked to sign a consent form (Appendix A). They were told the purpose and importance for such research and that to honestly complete the survey would have no impact on their treatment stay. They were given the choice of not completing the survey. A few clients did not complete the survey because their treatment diagnosis was not alcohol

related, or they were concerned about the information from the surveys being used against them in some way. Most of the clients were surveyed in a group setting, usually of 15 to 20.

Analysis

The F-SMAST and M-SMAST means were analyzed by using a 2 X 2 X 2 Analysis of Variance (ANOVA). The data met the assumptions required to conduct an ANOVA, such as independence, normality, and equality of variance (Neter, Waserman, and Kutner, 1990). A Levene test for equality of variance was computed to assure normality. A t-test was used to compare the means of each grouping variable: age, gender, and race. A Mann-Whitney and Chi-Square was also used to analyze >3 scores, on the F-SMAST and the M-SMAST of each group.

The M-SMAST and F-SMAST use a weighted 13 question yes or no format to detect if alcoholism is present in the respondent's parents. The scoring format is: 0-1 non-alcoholic, 2 is suggestive of alcoholism, >3 indicates alcoholism. A positive response to question 6, 10, or 11 also indicates alcoholism. The instrument could be scored categorically, problem/non-problem, or as a ratio score; 0 to >30. For the purpose of the ANOVA and T-test, the sum of each subject's F-SMAST and M-SMAST was used. For the Mann-Whitney and Chi-Square, each subject's F-SMAST and M-SMAST was scored as either problematic or non-problematic; a score greater than three was tagged alcoholic, if less than three, then it was tagged non-alcoholic. The data field was left blank if a subject claimed to not have a father or mother model.

In a sample of five studies, Crews and Sher (1992) found that the F-SMAST and M-SMAST demonstrated high reliability as well as validity. They recorded an alpha coefficient score of .87 for internal consistency for the F-SMAST and an alpha coefficient score of .74 for the M-SMAST. In a test-retest stability study of the F-SMAST, Crews and Sher reported that the intraclass correlation coefficients (ICCs) and Pearson correlation coefficients for the total scale score were both 0.94

($p<0.0001$). The ICCs and Pearson correlation coefficients for the M-SMAST were 0.85 ($p<0.0001$) and 0.84 ($p<.0001$), respectively. ICCs intersibling agreement for the F-SMAST was 0.86 ($p<0.0001$) and 0.52 ($p<0.0001$) for the M-SMAST.

Results

Table 1 presents a summary of the groups statistics.

Table 1
Summary of Groups

			M-SMAST		F-SMAST	
Groups	N	%	$\bar{X}$	S.D.	X	S.D.
< 35	69	49.6	5.3	7.1	7.1	8.1
> 35	64	50.4	3.5	6.3	5.9	6.9
Native	58	43.3	10.7	6.2	9.4	7.5
Nonnative	76	56.7	11.3	7.3	6.8	7.8
Male	80	59.7	10.4	6.7	6.2	6.7
Female	54	40.3	11.4	6.7	11	9

Table 2 presents the t-test for the F-SMAST. There is no significant difference between the group means; however, for gender, the t-test shows a trend toward higher F-SMAST means for women ($M = 11$, $SD = 9$) than men ($M = 6.2$, $SD = 6.7$), $t\ (125) = -1.600$, $p < .15$. The F-SMAST t-test also shows a trend toward higher Native F-SMAST means ($M = 9.4$, $SD = 7.5$) than non-Native means ($M = 6.8$, $SD = 7.8$), $t\ (125) = 1.567$, $p = < .15$.

Table 2

F-SMAST T-Test for Group Means

FSMAST	T-Test for Equality of Means					
	T	Df	Sig (2 tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Lower
Male/Female	-1.600	125	.112	-2.1810	1.3632	-4.8790
Native/NonNative	1.567	125	.120	2.1128	1.3483	-.5557
Under 35/Over 35	.869	125	.386	1.1736	1.3503	-1.4988

Table 3 presents the t-test comparing the M-SMAST means of each group. Non-Native means (M = 11.3, SD = 7.3) were significantly higher than Native means (M = 10.7, SD = 6.2) = 2.21, $p < .05$. A trend in the direction for gender differences was indicated for male (M = 10.4, SD = 6.7) and female (M = 11.4, SD = 6.7) = -1.759, $p < .1$. Tables 2 and 3 indicate no significant differences by age on the M-SMAST or F-SMAST.

Table 3

M-SMAST T-Test for Group Means

MSMAST	t-test for Equality of Means					
	t	Df	Sig (2 tailed)	Mean Diff.	Std. Error Diff.	95% Confidence Lower
Male/Female	-1.759	131	.081	-2.1020	1.1951	-4.4662
Native/NonNative	2.215	131	.028	2.5810	1.1653	.2758
Under 35/Over 35	1.534	131	.127	1.8032	1.1756	-.5223

Table 4 presents the M-SMAST ANOVA, which did not reveal any significant differences.

Table 4

M-MAST ANOVA by Age, Ethnicity and Gender

		Unique Method			
		Sum of Squares	df	Mean Square	F
M-MAST Main Effects	(Combined)	78.582	3	26.194	.558
	Age	57.621	1	57.621	1.227
	Ethnicity	20.122	1	20.122	.428
	Gender	.972	1	.972	.021
2-Way Interactions	(Combined)	49.562	3	16.521	.352
	Age*Ethnicity	36.237	1	36.237	.771
	Age*Gender	24.241	1	24.241	.561
	Ethnicity*Gender	.0016	1	.0016	.000
3-Way Interactions					
	Age*Ethnicity*Gender	2.927	1	2.927	.062
	Model	144.938	7	20.705	.441
	Residual	2160.765	46	46.973	
	Total	2305.704	53	43.504	

Table 5 presents the F-SMAST ANOVA. Main effects were found for Age and Gender, $p < .05$. Two-way interactions were found for Age and Ethnicity, $p < .05$, and Ethnicity and Gender, $p < .01$. There was a three way interaction between Age, Ethnicity, and Gender, $p < .001$.

Table 5

F-SMAST by Age, Ethnicity, Gender

			Unique Method			
			Sum of Squares	df	Mean Square	F
F-SMAST	Main Effects	(Combined)	983.546	3	327.849	6.545***
		Age	279.655	1	279.655	5.583
		Ethnicity	.402	1	.402	.008
		Gender	660.139	1	660.139	13.179***
	2-Way Interactions	(Combined)	545.864	3	181.955	3.633*
		Age*Ethnicity	201.907	1	201.907	4.031*
		Age*Gender	73.308	1	73.308	1.464
		Ethnicity*Gender	355.074	1	355.074	7.089***
	3-Way Interactions					
		Age*Ethnicity*Gender	302.513	1	302.513	6.039*
		Model	1421.051	7	203.007	4.053**
		Residual	4908.808	98	50.090	
		Total	6329.858	105	60.284	

All effects entered simultaneously
*$p < .05$. **$p < .01$. ***$p < .001$.

Figure 4. Two way significant interaction between age and ethnicity from Table 5.

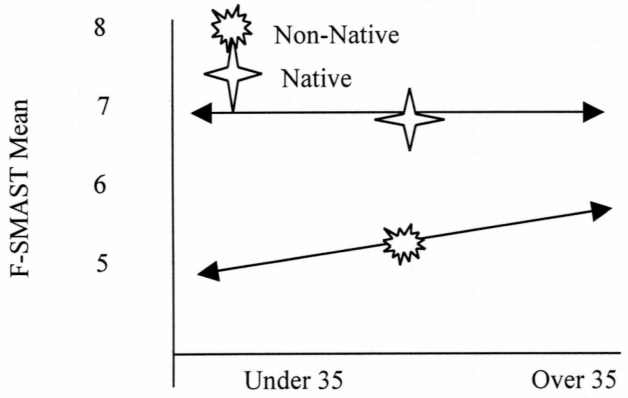

Figure 4. The Native F-SMAST means, though higher than non-Native F-SMAST means, did not vary by age but non-Natives over 35 had significantly higher F-SMAST means than non-Natives under 35. This might indicate that the younger generation of non-Native parents exhibit less problematic drinking behaviors than the older parents of non-Natives while Native parents haven't changed their drinking habits.

Figure 5. Two way significant interaction between age and gender.

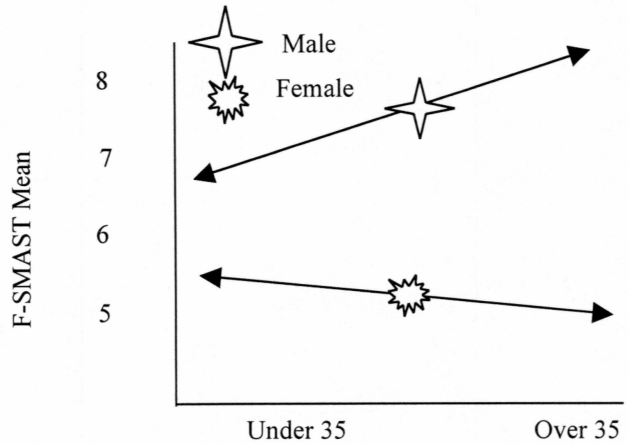

Figure 5. Overall, males over 35 have the highest F-SMAST means. Females, especially in the over 35 group, have the lowest F-SMAST means. The generation effect holds true for males in that the older

male group have witnessed more problematic drinking by their fathers.

Figure 6. Two way significant interaction between gender and ethnicity.

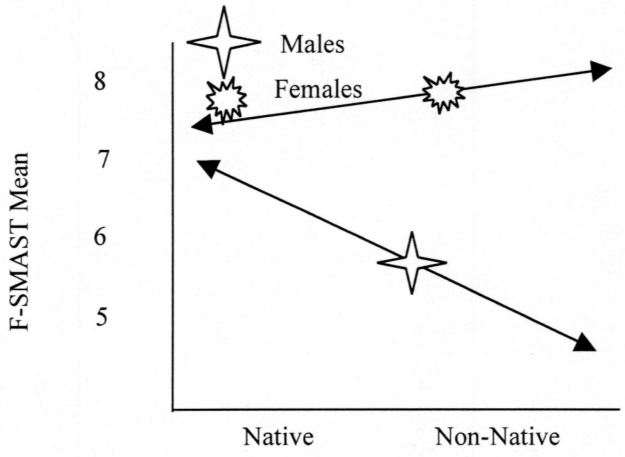

Figure 6. Native males have significantly higher F-SMAST means than non-Native males whereas non-Native females have slightly higher F-SMAST means than Native females. This interaction reveals that the experience of father's drinking varies by ethnicity for both males and females.

Table 6 presents, for each comparison group, the number and percentage of respondents who reported problematic drinking in the home. A very high number of the subjects reported no problematic drinking in the home. Not represented in the table are the twenty-eight subjects who reported that they had no father or mother model in their early life.

Table 6

Parental Problematic Drinking by Comparison Groups

Model	Male	Female	Under 35	Over 35	Native	NonNative
Father	20 (25%)	12 (22%)	15 (22%)	17 (26%)	14 (24%)	18 (24%)
Mother	5(6%)	5 (9%)	6 (9%)	4 (6%)	8 (14%)	2 (2%)
Both	16 (20%)	17 (32%)	20 (29%)	13 (20%)	18 (31%)	15 (20%)
Neither	39 (49%)	20 (37%)	28 (40%)	31 (48%)	18 (31%)	41 (54%)

Non-parametric analysis using the Mann-Whitney, Table 7, was conducted for age, gender, and ethnicity. There was a significant difference in the distribution of parental problematic drinking by ethnicity; Native parents displayed higher levels of problem drinking behaviors.

Table 7

Mann-Whitney Analysis for Father/Mother Problem Drinking

	Birth	Ethnic	Gender
Mann-Whitney U	139.000	102.000	140.000
Wilcoxon W	194.000	157.000	668.000
	-.716	-1.979	-.695
Asymp. Sig Z (2-tailed)	.474	.048	.487
Exact Sig. [2*(1-tailed Sig.)]	.551*	.090*	.570*

* Not corrected for ties.

The Chi Square, Table 8, revealed significance by gender. A significance difference exists in the distribution of problematic drinking in the homes of males and females. This finding is in conflict with the Mann Whitney analysis which did not reveal a significant finding by gender. No explanation could be found for the conflicting results.

Table 8

Chi Square analysis of Problematic modeling by birth, gender, and ethnic grouping

	Birth	Ethnic	Gender
Chi-Square*	.119	2.418	5.045
Df	1	1	1
Asymp. Sig.	.730	.120	.025

a. 0 cells have expected frequencies less than 5. The minimum expected cell frequency is 67.0.

Discussion

The first hypothesis, that F-SMAST and M-SMAST means of male alcoholics would be higher than female alcoholics, is not supported by the data. Though not significant at $p < .05$, females have a higher M-SMAST mean ($M = 11.4$, $SD = 6.7$) than men ($M = 10.4$, $SD = 6.7$), and a higher F-SMAST mean ($M = 11.0$, $SD = 6.9$) than men ($M = 6.2$, $SD = 6.7$). The Mann-Whitney was not significant for difference by gender of mother problematic drinking but the Chi Square did reveal significance for father problematic drinking. Female alcoholics in treatment observed more problematic father drinking behaviors than male alcoholics in treatment. Studies of risk factors done by Sambrano, Springer, and Hermann (1997) of the High-Risk Youth program by the Center for Substance Abuse Prevention (CSAP) with approximately 10,000 subjects and 48 program levels, indicated that females differ from males in risk factors related to substance abuse/use. Their early demonstration grants found factors such as sexual and physical abuse, delinquency, prostitution, pregnancy, child birth, single parenthood, sexually transmitted diseases, and being a high school dropout were higher substance risk factors for females than males. That females experienced more problematic drinking behaviors in their father model than did men supports Coombs & Paulson's (1988) belief that being able to discuss personal problems with fathers appears to have high potential for discouraging substance use behaviors in females. A father who is an alcoholic may be unapproachable.

The second hypothesis, that Native M-SMAST and F-SMAST means would be higher than non-Native means, was not supported by the data. The M-SMAST means of Natives were significantly lower ($M = 10.7$, $SD = 6.2$) than the means of non-Natives ($M = 11.3$, 7.3), $p < .05$. The F-SMAST Native means ($M = 9.4$, $SD = 7.5$) and the non-Native means ($M = 6.8$, $SD = 7.8$), were not significantly different at $t (125) = 1.567$, $p = .120$. The Mann-Whitney revealed a significant

difference in ethnicity of the subjects from problem drinking homes.

The third hypothesis proposed that there would be no significant difference between F-SMAST and M-SMAST means of subjects younger than 35 and subjects older than 35. This was supported by the data although the ANOVA revealed a 3-way interaction by age, ethnicity, and gender. A comparison of the younger than 35 and older than 35 means, using a t-test, was not significant. The Mann-Whitney and Chi Square analysis did not reveal a significant difference in the distribution of problematic drinking between the over and under 35 group.

This research found main effects for age and gender on parental problematic drinking scores. Men and Native participants reported higher levels of role model drinking. Underlying these main effects, important two-way interactions presented themselves in the F-SMAST ANOVA. There were significant two way interactions between age and ethnicity, age and gender, and gender and ethnicity. Non-Natives under 35 reported less male role model drinking, males under 35 reported less male role model drinking, and non-Native males reported less male role model drinking. Underlying these main effects and two way interactions was a three way interaction: non-Native males under 35 years of age report lower levels of perceived role model problem drinking. These results indicate that a generational difference may exist. Older non-Native males witnessed more father problematic drinking than younger non-Native males. This could mean that younger non-Native fathers are changing their drinking habits such as drinking outside the home or not drinking at all.

The three-way interaction, underscored by younger Native male drinking, can also be accounted for by several studies on peer pressure. Oetting and Beauvais (1987) state, "the single dominant variable in adolescent drug use is the influence provided by peers" (p. 206). Their psychosocial theory of peer clusters emphasize that peer groups shape a great deal of adolescent behavior, including drug use. All other influence in the life of an adolescent must go through that peer

group either directly or indirectly. In other peer group studies (Cotterell, 1996; Finley, 1989; Gfellner, 1994; Oetting & Beauvais, 1983) report that drinking youth associate with other drinking youth.

The two statistical analysis methods used, parametric and nonparametric, sometimes gave dissimilar indications of differences. Differences may be explained by the fact that the nonparametric Chi-Square and Mann-Whitney analysis compare the difference in the distribution of problematic/non-problematic scores in the groups, while the parametric t-test and ANOVA compare the difference in the means of the instruments. Individuals who score just above the cutoff to be considered coming from problematic drinking homes might be very different from individuals who score high above the cutoff, indicating greater distress concerning parental drinking behaviors. The parametric analysis considered a parent scoring higher on the M-SMAST or F-SMAST more of a problematic drinker than a parent who scored lower according to the rating scale devised for the instruments.

Summary

The findings from the current study expand the literature on the early childhood experiences of alcoholics in treatment. The literature is replete with examples of youth following the examples of parental models especially concerning drinking behaviors. This current study found that a large percentage of alcoholics in treatment did not have a parental drinking model or many times a parental model at all. One tenet of the social learning model may account for the lack of problematic drinking models in this population. An inhibitory effect may be caused by the observation of a negative consequence to a formally inhibited behavior. The observers decrease that behavior themselves. Adults who grew up in alcoholic homes may learn to avoid problematic drinking behavior, which would lead one to conjecture that a high number of people in treatment had not observed this negative consequence of alcohol abuse and may have a more naive view of alcohol.

In the nature/nurture debate, nurture proponents have theorized that problematic drinking by

youth may be caused by parents modeling problematic drinking, or by the children being subjected to deficient parenting by alcoholic parents. An underlying assumption of such research is that the alcoholic family environment is dysfunctional and the adult child of an alcoholic suffers emotional and physical problems as a result (Bradshaw, 1988; Woitiz, 1990). But Cohen (1999) found in his comprehensive study on identical twins, that with some traits, differences in rearing may have a relatively small effect on a child's development; with other traits, differences in rearing can make a big difference. Despite exposure to behaviors modeled by parents and years of social conditioning, people can resist or out grow the influences that are incompatible with their preferred ways of behaving.

The nature proponents have explained alcoholism as an inherited disease. A person may inherit the propensity for alcoholism due to its effect on the brain. Alcoholism is a result of a gene potential passed on by parents. If the factors that place an individual at risk are reduced, ultimately the chances of substance use and abuse will be decreased.

Limitations

This study does not include other important and related variables in family relationships such as the significance of the strength of the bond between drinker and child and the number of drinkers in the home. Non-alcoholics were not sampled. Also, all the limitations inherent in retrospective studies are also included in this study, for example, recalling a time period when extensive developmental processes are occurring plus how the alcoholics' perceptions may be influenced by their own alcoholism. In addition, Dielman, Leech and Loveland-Cheny (1995) found, by asking parallel questions concerning alcohol use of 199 mother/child pairs, 172 father/child pairs, and 171 mother/father pairs, high correlations between parents' and children's reports of the parents' alcohol use but that the children tended to underestimate the alcohol use of parents.

Further Research

There is a need to discover genetic and environmental factors in a person's life that ameliorate dangerous youth drinking. Much research has focused on the family as a causation factor in problematic drinking but, as this research found, adults experience problematic drinking regardless of the type of drinking modeled in their homes. Many of the subjects in this study did not grow up in problematic drinking homes. Problematic alcohol drinking must be related to a combination of intra and inter personal factors: psychoactive effects, parenting style, peer group, social skills, cultural attitude, emotion management skills, hopelessness. The current study suggests more research should focus on discovering what aspects of adult life facilitate the change from teen/young-adult risky drinking to moderation or abstinence form alcohol.

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Appendix A

Consent for Voluntary Participation in a Alcohol Research Study: As mandated by the Dept. of Health & Human Service, incorporating IER conditions established by the Declaration of Helsinki, according to the changes recommend by the Belmont Report (July 27, 1981), and the pertaining requirements of the UAF Institutional Review Board, Human Subjects Committee. Consent Revised: July, 1991.

You are invited to participate as a voluntary participant in a research project attempting to ascertain the connection between the way parents drank and the way their children drink as adults. You are required to be 18 or over to continue.

1. The procedure involves filling out a questionnaire that requests you to remember the period of time before you were 13 or before you entered 7th grade. You will be asked to recall the type of drinking you perceived occurring in your home during that period of time.

2. Complete confidentiality of your individual data will be maintained. Data is stored in a locked brief case in the researcher's home. There will also be no identifying marks on your data sheet.

3. Your participation is voluntary. You are free to withdraw from the study at any time. You are free to ask questions at any time. If you find you need to talk about your drinking following the quires, a list of available resources will be provided to you.

3. If you have any pertinent questions now, or later about the research, or your rights as a research subject, call:

Victor J. Behling	or	Gerald Mohatt, EdD
474-3469 FTVJB@Aurora.Ak		474-6415 FFGVM@Aurora@Ak

==========

Date:_____ Signature of participant:_____

Signature of researcher:_____

Appendix B

Test for Fathers (F-SMAST) Circle yes or no for each question.

YES NO Do you feel your father has been a normal drinker? No=2
YES NO Did your mother, grandparent, or other near relative ever complain about your father's drinking? Yes=1
YES NO ·Did your father ever feel guilty about his drinking? Yes=1
YES NO ·Did friends and relatives think your father was a normal drinker? * No=2
YES NO ·Was your father able to stop drinking when he wanted to? No=2
YES NO ·Has your father ever attended a meeting of Alcoholics Anonymous? Yes=5
YES NO ·Has your father's drinking ever created problems between him and your mother (or step-parent) or another near relative? Yes=2
YES NO ·Has your father ever gotten into trouble at work because of drinking? Yes=2
YES NO ·Has your father ever neglected his obligations, family, or work for two or more days in a row because he was drinking? Yes=2
YES NO ·Has your father ever gone to anyone for help about his drinking? Yes=2
YES NO ·Has your father ever been in a hospital because of drinking? Yes=5
YES NO ·Has your father ever been arrested for drunken driving. driving while intoxicated, or driving under the influence of alcoholic beverages? Yes=2
YES NO ·Has your father ever been arrested, even for a few hours, because of other drunken behavior? Yes=2

Test for Mothers (M-SMAST) Circle yes or no for each question.

YES NO ·Do you feel your mother has been a normal drinker? * No=2
YES NO ·Did your father, grandparent, or other near relative ever complain about your mother's drinking? Yes=1
YES NO Did your mother ever feel guilty about her drinking? Yes=1
YES NO Did friends and relatives think your mother was a normal drinker? * No=2
YES NO ·Was your mother able to stop drinking when she wanted to? No=2
YES NO ·Has your mother ever attended a meeting of Alcoholics Anonymous? Yes=5
YES NO ·Has your mother's drinking ever created problems between her and your father (or step-parent) or another near relative? Yes=2
YES NO ·Has your mother ever gotten into trouble at work because of drinking? Yes=2
YES NO ·Has your mother ever neglected her obligations, family, or work for two or more days in a row because she was drinking? Yes=2
YES NO ·Has your mother ever gone to anyone for help about her drinking? Yes=2
YES NO ·Has your mother ever been in a hospital because of drinking? Yes=5
YES NO ·Has your mother ever been arrested for drunken driving, driving while intoxicated, or driving under the influence of alcoholic beverages? Yes=2
YES NO ·Has your mother ever been arrested, even for a few hours, because of other drunken behaviors? Yes=2

Appendix C
Demographics Questionnaire

Please answer the following questions as accurately as you can.

1. Your age:____
2. Please circle your sex: Male Female
3. Please circle the racial/ethnic group that best describes you:

Eskimo (__Yupik, ___Inupiat)
Haida Tsimshain
Athabascan African-American
Aleut Hispanic
Tlingit Native American
Tlingit Caucasian
Other (please specify)_____

4. Please circle your marital status:

Single Separated
Married, how many times___ Widowed
Divorced, how many times___
Divorced/remarried
Widowed/remarried

5. Please circle your normal living status:

Own home
Parents home
Rent
Other (please specify) _____

6. Circle the place you mostly lived in during the ages of 0 to 13.

Fairbanks
Anchorage
Juneau
Village (please specify):_____
Other (please specify):_____

7. If you lived in a village was it: Wet Damp Dry

8. Between the ages of 0 to 13 who would you consider as being the person/persons who raised you the most (circle all that apply):

Biological father
Biological mother
Step-father
Step-mother
Grandmother
Grandfather
Other (please specify)

9. At what age did you take your first drink: _____
10. At what age do you think drinking became a problem for you: ____